

Water Education Drops

March 2003

March is

Non-Point Source Pollution Month

History

In 1987, Congress established the Non-Point Source (NPS) Pollution Management Program under Section 319 of the Clean Water Act (CWA). The program provides states with grants to implement NPS pollution controls to achieve goals that they outline in state-specific management plans. These management plans contain goals and objectives that when fully implemented will restore and protect water quality. Since 1998, EPA has provided over \$150 million to Region III states under this program.

Questions:

Q1. What is non-point source pollution?

Q2. What percentage of surveyed rivers, lakes and estuaries are not clean enough to meet basic uses such as fishing or swimming?

20% or
40% or
60% or
80%

Q3. Our region has over 20,000 miles of streams, rivers and creeks that are impaired or polluted. Of the assessed impaired waters, how many of these are impaired due to Non-Point pollution?

33% or
45% or
67% or
88%

Q4. What are TMDL's and how do they relate to NPS?

Answers:

Q1. What is non-point source pollution?

A. NPS pollution occurs when rainfall, snow melt or irrigation travels over land or through the ground; picks up pollutants and deposits them into rivers, lakes and coastal waters or introduces them into ground water.

Q2. What percentage of surveyed rivers, lakes and estuaries are not clean enough to meet basic uses such as fishing or swimming?

A. 40%

Q3. Our region has over 20,000 miles of streams, rivers and creeks that are impaired or polluted. Of the assessed impaired waters, how many of these are impaired due to NPS pollution?

A. 88%

Q4. What are TMDL's and how do they relate to NPS?

A. TMDL stands for Total Maximum Daily Load. The TMDL represents the maximum amount of a pollutant allowed to enter a waterbody by law so that the waterbody will meet and continue to meet the water quality standards for that particular pollutant under the Clean Water Act. Pollutants are anything that prevents a waterbody from attaining the national goal of being "fishable and swimmable." Common pollutants include sediment, metals (often from mining activities), toxic chemicals, fecal coliform bacteria, pH, and excessive nutrients.

Link to: <http://www.epa.gov/reg3wapd/tmdl/> for further TMDL information

Check the Web Site Below for Several Region III

NPS Success Stories

<http://www.epa.gov/reg3wapd/nps/pdf/pamphlet.pdf>

Success Story Examples follow for each state:

Delaware: The Coverdale Community had contaminated drinking water caused by malfunctioning septic systems and improperly placed wells. In addition, living conditions in the summer camp and now permanent community were deplorable.. Through a partnership lead by DNREC NPS Program, and with the help of many community organizations, such as the DE Housing Authority, Greenwood Trust Bank and Sussex Conservation District, approximately 50 wells and the 100 septic system

were replaced. Through the help of these groups, the community has not only improved water quality, but also the standard of living for many of the Coverdale residents.

District of Columbia: Watts Branch, a tributary to the Potomac River, is polluted, mostly caused from storm water runoff and illegal dumping. The District of Columbia, in partnership with the USDA-NRCS and USF&W Service, has stabilized nearly 2000 feet of eroding streams. In addition, volunteer organizations and civic groups have helped with stream beautification and cleanup. In a little over one year, Parks and People, a non-profit organization, organized more than 4000 volunteers to collect over 7000 bags of trash and hauled away 26 abandoned vehicle. In addition signs and surveillance cameras have been installed to deter further dumping. Watts Branch is on its way back to becoming a clean river.

Maryland: Antietam Creek, which has been transporting highly polluted agricultural waste into the Chesapeake Bay, became a priority for the Washington Council County Conservation District and its partners. The groups implemented 3,600 conservation plans and projects, including installation of agricultural, manure management systems, stream fencing, livestock watering facilities, stream restoration projects and widespread education efforts. The MD Department of the Environment has recently shown that the stream water quality has improved

Pennsylvania: Urban stormwater runoff, nitrogen and phosphorus loadings have been responsible for degrading Lititz Run in Warwick Township. The local government has worked closely with the Lititz Run Watershed Alliance to improve water quality through combined techniques in natural resource management, land use planning, education and community involvement. Projects include agricultural management plans throughout the watershed, creation of a GIS databases, water quality monitoring network, stream bank stabilization, establishment of forested riparian buffers along the stream and a public education program. Tangible results included: improvement in water quality, sighting of a Black Crowned Night Heron and improved wildlife habitat along a restored section of the stream.

Virginia: Cabin Branch Pyrite Mine operated along Quantico Creek from 1890 until the 1920's, when it was abandoned. Highly acidic mine tailings and toxic discharge from improperly sealed mine shafts have polluted the water. Now a part of the Prince William Forest Park, the area has become a priority of the National Park

Service. Reclamation components include diverting storm waters away from mine sites and sealing mine shafts, helping to increase the fish community downstream. In addition, 150 volunteers helped plant 5000 native shrubs and trees and the site is now used as an educational tool to help inform people about acid mine drainage.

West Virginia: The North Fork and South Fork of the South Branch of the Potomac River had been identified by the WVDEP as polluted with high levels of bacteria and sediments originating mostly from agricultural sources. The watershed became a major priority for the WV Conservation Partnership for restoration. The result, over 85% of the farmers in the watershed are implementing agricultural Best Management Practices. The funding sources for this project have been EPA NonPoint Source Section 319 grants, the State Revolving Fund Loan Program, state grants and USDA PL-534 cost sharing. Recent water quality monitoring studies have determined that the stream may soon be eligible to be taken off the list of impaired waters, that is, that it meets the Federal Clean water Act goal as a fishable and swimmable water body.

This WV project is a wonderful example of federal, state and local governments, as well as community groups, all working together for a common cause. Stay tuned for a full report about the North Fork area in a future presentation.

For more information on NPS, go to:

<http://www.epa.gov/reg3wapd/nps/index.htm>

or Contact Fred Suffian at:

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